

ABSTRACT OF THE DISCLOSURE

A method is described for stereoselectively reducing an unsaturated alkyl ketone substituent attached to a fused ring base. In this method, the unsaturated alkyl ketone reacts with a chiral oxazaborolidine reagent. This reaction stereoselectively reduces the unsaturated alkyl ketone to an unsaturated alkyl alcohol. The unsaturated alkyl alcohol can be further reduced, if desired, to produce a saturated alkyl alcohol. The fused ring base can be, for example, a steroid ring base or a base of a vitamin D analog. The process in accordance with the invention can be used with an alkeneone substituent (e.g., a 22-ene-24-one substituent) or an alkyneone substituent (e.g., a 22-yne-24-one substituent) on a steroid ring base to make squalamine or other useful aminosterol compounds and intermediates for making aminosterol compounds.